MULTIMEDIA UNIVERSITY

STUDENT ID NO

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FINAL EXAMINATION

TRIMESTER 1, 2016/2017

BAC3674 – ADVANCED MANAGEMENT ACCOUNTING
(B01)

20th October 2016
2.30 P.M. – 5.30 P.M.
(3 HOURS)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **5 pages** (exclusive of cover page).

2. **Answer ALL FOUR (4) questions.** All questions carry equal marks and the distribution of the marks for each question is given.

3. Please provide all your answers in the Answer Booklet provided.

Question 1

Edaran Bhd manufactures and installs car navigation systems. Three models are manufactured: X, Y, and Z, and sold to car retailers. The manufacturing of the models is machine intensive, but the installation requires a significant amount of labour. The accountant is concerned that all models are as profitable as possible. He suggested using Activity Based Costing (ABC) for the allocation of overheads. Earlier Edaran Bhd has been using a traditional method based on direct labour hours (DLH). The following are some data extracted from the records of Edaran Bhd.

	MODEL X	**MODEL Y**	**MODEL Z**
Annual output (units)	800	1,500	2,500
Annual Direct Labour Hours (DLH)	100,000	220,000	180,000
Selling Price (RM per unit)	5,850	8,000	5,000
Raw material cost per unit (RM per unit)	3,000	1,250	1,000
Number of deliveries to car retailers	150	100	200
Number of machine set-ups	45	50	35
Number of quality test controls	40	65	90

The three cost drivers that generate overheads are: number of deliveries to car retailers, number of machine set-ups, and number of quality tests performed. The annual overhead costs relating to these activities are:

Deliveries to car retailers	RM2,250,000
Set-up costs	RM2,650,000
Quality test controls	RM1,000,000
Total overhead costs	**RM5,900,000**

Direct labour is charged at RM 8 per hour. Currently, Edaran uses cost-plus pricing. No inventories are kept.

The managers of the finance department had a meeting to discuss whether to adopt ABC. Below are the key points of the discussion:-

- A junior staff remarked that direct labour hours (DLH) can still be used to cost for product overheads, because the calculations showed that the overall profit remained the same whether ABC is adopted or not. So, why do we need to switch to ABC?
- If the labour force repeats a certain activity, they gain knowledge, hence labour time and labour cost is reduced. This point is not considered in ABC.

Required:

a) Calculate the total profit for each of the models using ***both*** traditional costing and then ABC, to apply overheads. (12 marks)

b) Comment on the points raised during the meeting, stating whether you agree or not, and giving your reasons. (8 marks)

Continued ...

c) Explain how target costing and product lifecycle costing can be combined with ABC. (5 marks)

[TOTAL 25 MARKS]

Question 2

Part A

AmBest Bhd has two foreign divisions in different countries: Division A and Division B. The two divisions are classified as profit centres for evaluation purposes by AmBest Bhd.

During the current year Division A, incurred production costs of RM4 million for component units that are transferred to the other foreign division, Division B.

Third party costs (additional costs) in Division B totalled RM8 million. Sales revenue for the final product for Division B are RM30 million.

Other companies in the same country import a similar type of component as used by Division B at a cost of RM7 million. However, AmBest Bhd has set the transfer price for this component at RM14 million, justifying this price because of the special controls it has on the operations in Division A as well as its special manufacturing method.

The tax rate in the country where Division A is located is 40% while the tax rate for Division B's country is 70%.

Required:

i.) What would AmBest's total tax liability for both divisions be if it used the RM7 million transfer price? (5 marks)

ii.) What would the tax liability be if it used the RM14 million transfer price? (5 marks)

iii) The current transfer price used (above) has caused discontent to Division B's management, and they are demanding for more decentralization with regards to the setting of transfer prices. In your opinion, is the demand justified? Give your reasons. (5 marks)

Continued ...

Part B

MLM Investments has two divisions (B and C) organized for performance-evaluation purposes as investment centers. Each division's required rate of return for purposes of calculating residual income (RI) is 15%. Budgeted operating results for 2017 for each of the three divisions are as follows:

Division	Operating income	Investment
B	RM25,000,000	RM125,000,000
C	RM11,000,000	RM50,000,000

MLM is planning an expansion project, which will require each division to increase its investments by RM25,000,000 and its operating income by RM4,500,000.

Required:

i. Compute the current Return on Investment (ROI) and Residual Income (RI) for each division. (4 marks)

ii. Determine the effects after adding the new project to each division's ROI and RI. (4 marks)

iii. What would be the individual division managers' preferences with regards to the expansion project, and why? (2 marks)

[TOTAL 25 MARKS]

Question 3

Durable Bhd is considering replacing an old drilling machine that cost RM200,000 six years ago with a new one that costs RM450,000. Shipping and installation cost an additional RM60,000. Staff training and support costs for the new machine will be RM50,000. The old machine has been depreciated using the straight-line method with no salvage value over an estimated 8-year useful life. The old machine can be sold for RM40,000 now or RM10,000 in two years.

Management expects increases in inventories of RM10,000, increases in accounts receivable of RM32,000, and increases in accounts payable of RM12,000 if the new machine is acquired. Durable's income tax rate is expected to be 30 percent over the years affected by the investment.

Required:

i) What is Durable's net initial investment (i.e., its after-tax initial cash outlay for the new machine)? (17 marks)

ii) In practice, a comprehensive capital investment appraisal exercise has to be performed on the proposed new drilling machine. Suggest and explain a few ways to perform this. (8 marks)

[TOTAL 25 MARKS]

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Question 4

The budget committee for Amacom Company, with the help of the district sales manager, projects sales of 80,000 units of its primary product next year. The budget committee and key executives have decided that finished goods inventory should be decreased from the 10,000 units expected at the end of the current year, to 7,000 units at the end of next year. Each unit of finished product requires three units of material MPS15 and six units of material NAV23. At the end of the current year, the inventory of material MPS15 is expected to be 10,000 units and material NAV23 is expected to be 20,000 units. The budget committee believes that these material inventories can be reduced by 80% during the coming year because of the newly installed supply chain system.

Required:

i. Calculate the number of units Amacom expects to produce during the next year. (2 marks)

ii. Compute the number of units that should be purchased of each of the raw materials in order to produce the budgeted units and comply with inventory policy. (8 marks)

Nasa Auto is a large national car manufacturing business, which has just embarked on a privatization program with profit maximization objectives. The company has a strong regional position, which has a population of 200 million and forms the majority of Nasa's market. Additionally, the government is deregulating markets and opening the country to imports of foreign vehicles. Nasa's management recognizes that it needs to make fundamental changes to its production approach in order to combat increased competition from foreign manufacturers.

Nasa's cars are now being seen as ugly, pollutive and with poor safety features in comparison to the foreign competition. Management plans to address this by improving the quality of its cars through the use of quality management techniques. It plans to improve financial performance through the use of Kaizen costing and just-in-time purchasing and production. Nasa's existing performance reporting system uses standard costing and budgetary variance analysis in order to monitor and control production activities.

The Chief Financial Officer (CFO) of Nasa has commented that he is confused by the terminology associated with quality management and needs a clearer understanding of the different costs associated with quality management. The CFO also wants to know the impact of including quality costs and using the Kaizen costing approach on the traditional standard costing approach at Nasa.

Required:

iii. Write to the CFO to:

(a) Discuss briefly the impact of collection and use of quality costs on the current costing systems at Nasa. (3marks)

Continued ...

(b) Discuss and evaluate the impact of the Kaizen costing approach on the costing systems and employee management at Nasa. (8 marks)

(c) Briefly evaluate the effect of moving to just-in-time purchasing and production, noting the impact on performance measures at Nasa. (4 marks)

[TOTAL 25 MARKS]

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